OFDM TRANSMITTER, OFDM RECEIVER, OFDM COMMUNICATION EQUIPMENT USING THEM AND OFDM COMMUNICATION METHOD

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Abstract of **JP 2001069112 (A)**

PROBLEM TO BE SOLVED: To decode only the information sequence of a desired channel from the information sequences of many partial receiving channels, to which orthogonal frequency division multiplex(OFDM) modulation is applied, by transmitting the information sequences of many partial channels to a prescribed frequency band after OFDM modulation. SOLUTION: In an OFDM transmitter 10A, a mapping circuit 11A independently maps plural information sequences having a band width fBW and different central frequencies, a multiplexer 13A multiplexes the frequencies of plural mapping signals and a frequency converter 18 converts the frequency of an orthogonal modulation signal with a central frequency f3 as a reference among the central frequencies of plural information sequences. In an OFDM receiver 30A, a channel selector 39 sets the frequency of an information sequence to be set out of received channels and a frequency converter 32A converts the frequency of a signal having a frequency, for which an intermediate frequency fIF is added to a frequency fn selected by the channel selector 39, and the received signal. A frequency converter 38 performs frequency correction corresponding to the difference between the frequency f3 of a center among the central frequencies of plural information sequences and the frequency fn selected by the channel selector 39.